

The accumulated monthly departures from normal temperatures from January 1 to the end of the current month are given in the second column of the following table, and the average departures are given in the third column, for comparison with the departures of current conditions of vegetation from the normal conditions.

Districts.	Accumulated departures.		Districts.	Accumulated departures.	
	Total.	Average.		Total.	Average.
New England	+ 0.1	0.0	Middle Atlantic	- 5.5	- 0.6
Upper Lake	+ 4.9	+ 0.5	South Atlantic	-13.4	- 1.5
North Dakota	+ 6.2	+ 0.7	Florida Peninsula	-12.8	- 1.4
Upper Mississippi	+ 3.4	+ 0.4	East Gulf	-14.9	- 1.7
Missouri Valley	+ 5.9	+ 0.7	West Gulf	-14.2	- 1.6
Northern Plateau	+ 1.0	+ 0.1	Ohio Valley and Tenn.	- 8.0	- 0.9
			Lower Lake	- 1.5	- 0.2
			Northern Slope	-10.0	- 1.1
			Middle Slope	- 2.7	- 0.3
			Abilene (southern Slope) ..	-13.7	- 1.5
			Southern Plateau	- 7.1	- 0.8
			Middle Plateau	-12.1	- 1.3
			North Pacific	- 3.0	- 0.3
			Middle Pacific	- 4.9	- 0.5
			South Pacific	- 8.9	- 1.0

MOISTURE.

The quantity of moisture in the atmosphere at any time may be expressed by means of the weight contained in a cubic foot of air, or by the tension or pressure of the vapor, or by the temperature of the dew-point. The mean dew-points for each station of the Weather Bureau, as deduced from observations made at 8 a. m. and 8 p. m., daily, are given in Table I.

The rate of evaporation from a special surface of water on muslin at any moment determines the temperature of the wet-bulb thermometer, but a properly constructed evaporimeter may be made to give the quantity of water evaporated from a similar surface during any interval of time. Such an evaporimeter, therefore, would sum up or integrate the effect of those influences that determine the temperature as given by the wet bulb; from this quantity the average humidity of the air during any given interval of time may be deduced.

The sensible temperature experienced by the human body and attributed to the atmosphere depends not merely upon the temperature of the air, but equally upon the dryness, the velocity of the wind, and the suddenness of atmospheric changes. The temperature of the wet-bulb thermometer as obtained by the whirling apparatus used in the shaded shelter corresponds to the temperature felt by persons standing in the shade of trees or houses, exposed to a natural breeze of at least 6 miles per hour. This temperature and its depression below the dry bulb are the fundamental data for all investigations into the relations between human physiology and the climate. In order to present a monthly summary of the atmospheric conditions from a hygienic and physiological point of view, Table VIII has been prepared, showing the maximum, minimum, and mean readings of the wet-bulb thermometer at 8 a. m. and 8 p. m., seventy-fifth meridian time.

PRECIPITATION.

[In inches and hundredths.]

The distribution of precipitation for the current month, as determined by reports from about 2,500 stations, is exhibited on Chart III. The numerical details are given in Tables I, II, and III.

The precipitation was heaviest, 4.00 to 10.00 in the upper Lake Region, 4.00 to 9.00 in the Florida Peninsula, and 4.00 to 6.00 in the valley of the Rio Grande and on the coast of the South Atlantic States, Oregon, and Washington; it was

least, viz: 0.00 in Nevada, southern Florida, and western Arizona.

The diurnal variation is shown by Table XII, which gives the total precipitation for each hour of seventy-fifth meridian time, as deduced from self-registering gauges kept at about 43 regular stations of the Weather Bureau; of these 37 are float gauges and 7 are weighing gauges.

The normal precipitation for each month is shown in the Atlas of Bulletin C, entitled "Rainfall and Snow of the United States, compiled to the end of 1891, with annual, seasonal, monthly, and other charts."

The current departures from the normal precipitation are given in Table I, which shows that there was an excess in northern California, Oregon, Alberta, and portions of adjacent States. Elsewhere there was a general deficiency, and especially in eastern Texas, the Gulf, and Atlantic States.

The large excesses were: Indianapolis, 4.6; Sault Ste Marie, 2.9; Nashville, 2.7; Baltimore, 2.2. Deficits: Corpus Christi, 5.5; Galveston, 5.2; Cape Henry, 4.8; Kittyhawk and Norfolk, 4.7; Pensacola, 4.2; Port Eads, 4.1.

The years of greatest and least precipitation for September are given in the REVIEW for September, 1894. The precipitation for the current month was the greatest on record at: Sault Ste. Marie, 7.40; Indianapolis, 7.46; Sacramento, 1.26; Eureka, 3.14. It was the least on record at: Albany, 1.80; Vineyard Haven, 1.15; Cape Henry, 0.00; Lynchburg, 0.56; Raleigh, 0.38; Charlotte, 0.33; Cincinnati, 0.49; Lexington, 0.33; Chattanooga, 1.00; Atlanta, 0.21; Vicksburg, 0.14; Dodge City, 0.06; Port Angeles, 0.35.

The average departure for each district is also given in Table I. By dividing these by the respective normals the following corresponding percentages are obtained (precipitation is in excess when the percentages of the normals exceed 100).

Above the normal: Abilene (southern Slope), 139; northern Plateau, 205; middle Pacific, 402.

Below the normal: New England, 51; Middle Atlantic, 36; South Atlantic, 54; Florida Peninsula, 92; east Gulf, 24; west Gulf, 28; Ohio Valley and Tennessee, 67; lower Lakes, 70; upper Lakes, 91; North Dakota, 53; upper Mississippi, 88; Missouri Valley, 74; northern Slope, 78; middle Slope, 36; middle Plateau, 67; north Pacific, 82; south Pacific, 23.

The total accumulated monthly departures from normal precipitation from January 1 to the end of the current month are given in the second column of the following table; the third column gives the ratio of the current accumulated precipitation to its normal value.

Districts.	Accumulated departures.	Accumulated precipitation.	Districts.	Accumulated departures.	Accumulated precipitation.
Abilene (southern Slope) ..	Inches. + 5.00	Per ct. 124	New England	Inches. - 5.30	84
Southern Plateau	+ 0.40	105	Middle Atlantic	- 7.50	79
			South Atlantic	- 2.70	24
			Florida Peninsula	- 3.30	92
			East Gulf	- 4.30	90
			West Gulf	- 5.40	84
			Ohio Valley and Tenn.	- 9.70	73
			Lower Lakes	- 7.10	73
			Upper Lakes	- 6.30	78
			North Dakota	- 0.70	96
			Upper Mississippi	- 6.50	77
			Missouri Valley	- 3.30	88
			Northern Slope	- 0.40	97
			Middle Slope	- 1.30	93
			Middle Plateau	- 1.10	87
			Northern Plateau	- 2.60	78
			North Pacific	- 1.80	95
			Middle Pacific	- 0.90	95
			South Pacific	- 2.40	80

Details as to excessive precipitation are given in Tables XIII and XIV.

The total snowfall at each station is given in Table II. Its geographical distribution is given on Chart No. VI of total